UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY R. 91 W. R. 90 W. 13 17 (200 14) 1.8 25 T. 145 N. T. 145 N. T. 144 N. T. 144 N. 32 33 R. 91 W. R. 90 W. BASE FROM U.S. GEOLOGICAL SURVEY, 1970 COMPILED IN 1978 SCALE 1:24,000 1 .5 0 NORTH DAKOTA UTM GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET QUADRANGLE LOCATION

COAL RESOURCE OCCURRENCE MAP OF THE DODGE QUADRANGLE, DUNN AND MERCER COUNTIES, NORTH DAKOTA BY WOODWARD-CLYDE CONSULTANTS 1978

ISOPACH AND MINING RATIO MAP OF THE BEULAH-ZAP COAL BED

PLATE 13

OPEN FILE REPORT 78-068

PLATE 13 OF 15

This report has not been edited for conformity with U.S. Geological Survey editorial standards or

stratigraphic nomenclature.

EXPLANATION

Showing thickness in feet. Hachures indicate an area of local thinning of coal and a closed depression. Isopath interval I foot (0.3m).

LIMIT OF RESERVE BASE COAL ---- foot coal isopach. Arrow

DRILL HOLE--Showing thickness of the coal bed in feet.
(upper number). Showing value of mining ratio for
the coal bed within stripping limit (lower number).

MINING RATIO CONTOUR FOR THE COAL BED -- Number indicated cubic yards of overburden per ton of recoverable coal by surface

200 FOOT OVERBURDEN ISOPACH -- Used as boundary for surface mining. Arrows point toward area suitable for surface

To convert feet to meters, multiply feet by 0.3048.

To convert cubic yards/ton to cubic meters/tonne

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ISOPACH OF THE BEULAH ZAP COAL BED --

points toward reserve base coal.

mining methods.

mining.

multiply by 0.842.